

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1-10. (Cancelled).

11. (Currently Amended) A system for optimal Short Message Service (SMS) encoding in a wireless communications device having SMS capabilities, the system comprising:

an optimizing subsystem with an input to accept an SMS message, an input to accept an evaluation control signal, and an output to supply an optimizing signal responsive to the SMS message encoding requirements prior to encoding of the SMS message; and

an encoding subsystem with an input to accept the SMS message, an input to accept the optimizing signal, and an output to supply the SMS message in a format responsive to the optimizing signal.

12. (Currently Amended) The system of claim 11 wherein the evaluation control signal identifies encoding formats available in the wireless communication device and available encoding format parameters including the number of bits needed to represent characters.

13. (Original) The system of claim 12 wherein the optimizing subsystem evaluates the SMS message to identify available encoding formats usable for encoding the characters, wherein the optimizing subsystem determines a memory usage requirement, wherein the optimizing subsystem selects as the optimal encoding format a usable format with a minimum memory usage, and wherein the optimizing subsystem supplies the identity of the optimal encoding format in the optimizing signal.

14. (Original) The system of claim 13 wherein the encoding subsystem encodes the SMS message in the optimal encoding format and supplies the encoded SMS message at an output.

15. (Original) The system of claim 14 wherein a memory circuit has an input to accept the encoded SMS message for storage and an output to supply the stored SMS message.

16. (Original) The system of claim 15 wherein the wireless device is Mobile Origination enabled and the optimizing subsystem accepts the SMS message from a user interface; and,

wherein a transceiver has an input to accept the stored SMS message from memory for airlink transmission.

17. (Original) The system of claim 15 wherein the transceiver accepts an airlink communication including an SMS message;

wherein the optimizing subsystem accepts the SMS message from a transceiver; and,

wherein a user interface has an input to accept the stored SMS message for presentation.

18. (Original) The system of claim 15 wherein the encoding subsystem uses seven-bit ASCII as a default optimal encoding format.

19. (New) A method of encoding a Short Message Service (SMS) message, the method comprising:

encoding a SMS message using a SMS encoding format to generate an encoded SMS message; and

prior to encoding the SMS message, selecting the SMS encoding format based on a wireless device resource requirement of the encoded SMS message.

20. (New) The method of claim 19, wherein the selecting comprises selecting the SMS encoding format from a plurality of available encoding formats supported by a wireless communication device.

21. (New) The method of claim 20, further comprising:

identifying the SMS encoding format as usable for encoding the SMS message.

22. (New) The method of claim 21 wherein identifying the SMS encoding format as usable for encoding the SMS message comprises:

evaluating an English-language SMS message;

identifying seven-bit ASCII, ISO Latin 1, and Unicode formats as usable;

determining a number of bits needed to represent characters in the seven-bit ASCII, ISO Latin 1, and Unicode formats; and

selecting the seven-bit ASCII format as the SMS encoding format.

23. (New) The method of claim 21, wherein the identifying the SMS encoding format comprises determining a number of bits needed to represent characters in the available encoding format.

24. (New) The method of claim 20, further comprising determining a memory usage requirement of the encoded SMS message.

25. (New) The method of claim 20, wherein selecting the SMS encoding comprises selecting seven-bit ASCII as a default SMS encoding format.

26. (New) The method of claim 19, further comprising:

receiving the SMS message at a Mobile Origination enabled wireless device via a user interface; and

storing the SMS encoded message.

27. (New) The method of claim 19, further comprising:

receiving the SMS message at a Mobile Origination enabled wireless device via a user interface; and
transmitting the encoded SMS message.

28. (New) A Short Message Service (SMS) encoding system configured to generate an encoded SMS message by encoding a SMS message using a SMS encoding format and, prior to encoding the SMS message, selecting the SMS encoding format based on a resource requirement of the encoded SMS message.

29. (New) The SMS encoding system of claim 28, comprising:

an encoding subsystem comprising an input for receiving a signal indicating the SMS encoding format, the encoding subsystem configured to encode the SMS message in accordance with the signal; and

an optimizing subsystem configured to identify, prior to encoding of the SMS message, the SMS encoding format from a plurality of SMS encoding formats based on resources requirements corresponding to encoding the SMS message for each of the plurality of SMS encoding formats, the optimizing subsystem comprising an output for generating the signal.

30. The SMS encoding system of claim 29, wherein the resource requirement is an amount of memory required to store the encoded SMS message.